Scala in Practice
lab 01

Acceptance criteria:

Create a Scala script with content:

```scala
//scalar product of two vectors xs and ys
def scalarUgly(xs: List[Int], ys: List[Int]) = ???
def scalar(xs: List[Int], ys: List[Int]) = ???

//quicksort algorithm
def sortUgly(xs: List[Int]): List[Int] = ???
def sort(xs: List[Int]): List[Int] = ???

//checks if n is prime
def isPrimeUgly(n: Int): Boolean = ???
def isPrime(n: Int): Boolean = ???

//for given positive integer n, find all pairs of integers i and j,
where 1 ≤ j < i < n such that i + j is prime
def primePairsUgly(n : Int): List[(Int, Int)] = ???
def primePairs(n : Int): List[(Int, Int)] = ???

//create a list with all lines from given file
val filesHere = new java.io.File(".").listFiles
def fileLinesUgly(file: java.io.File): List[String] = ???
def fileLines(file: java.io.File): List[String] = ???

//print names of all .scala files which are in filesHere & are non
empty
def printNonEmptyUgly(pattern: String): Unit = ???
def printNonEmpty(pattern: String): Unit = ???
```

Implement all functions according to comments provided. The ones with name
Ugly should use **vars** & **do-while** loops, others should only use **vals** & **for comprehensions**.

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